

# Weekly Influenza & Respiratory Illness Activity Report

A summary of influenza surveillance indicators prepared by the Division of Infectious Disease Epidemiology Prevention & Control

**Week Ending January 12, 2019 | WEEK 2**

All data are preliminary and may change as more information is received

## Minnesota Influenza Geographic Spread

No Activity

Sporadic

Local

Regional

Widespread

During the week ending January 12, 2019 (Week 2), surveillance indicators showed widespread geographic spread of influenza  
*(based on CDC's Activity Estimates Definitions).*

Since the start of the influenza season, no pediatric influenza-related deaths have been reported.

Minnesota Influenza Surveillance (<http://www.health.state.mn.us/divs/idepc/diseases/flu/stats/>)

Weekly U.S. Influenza Surveillance Report (<http://www.cdc.gov/flu/weekly/>)

World Health Organization (WHO) Surveillance ([http://www.who.int/influenza/surveillance\\_monitoring/updates/en/](http://www.who.int/influenza/surveillance_monitoring/updates/en/))

Neighboring states' influenza information:

Iowa: [Iowa Flu Reports \(http://idph.iowa.gov/influenza/reports\)](http://idph.iowa.gov/influenza/reports)

Wisconsin: [Influenza \(Flu\) \(http://www.dhs.wisconsin.gov/communicable/influenza/\)](http://www.dhs.wisconsin.gov/communicable/influenza/)

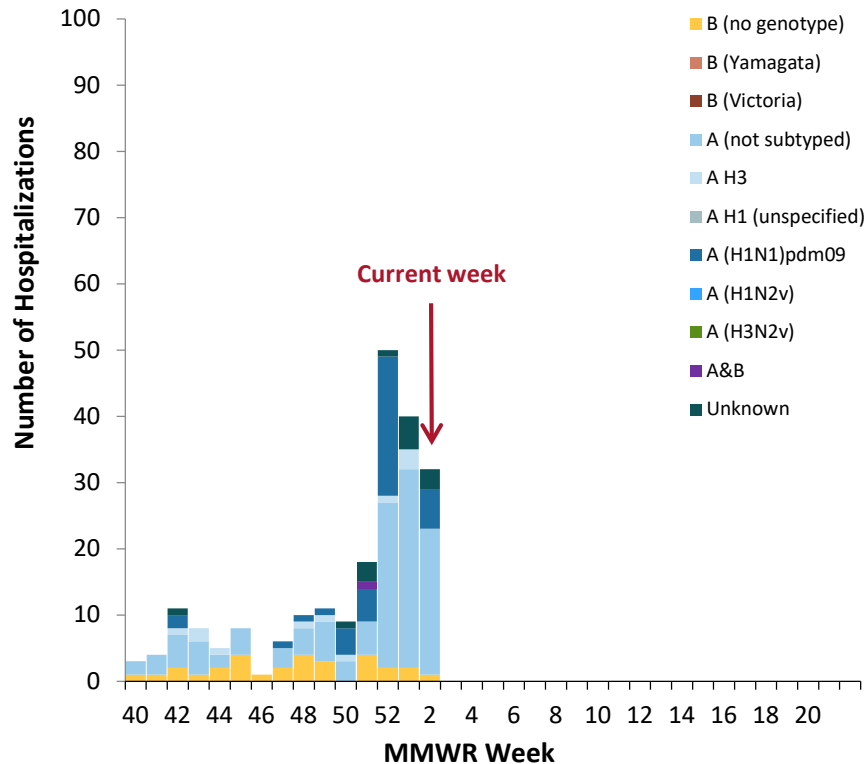
North Dakota: [Reported Seasonal Influenza Activity in North Dakota \(http://www.ndflu.com/default.aspx\)](http://www.ndflu.com/default.aspx)

South Dakota: [South Dakota Influenza Information \(http://doh.sd.gov/diseases/infectious/flu/\)](http://doh.sd.gov/diseases/infectious/flu/)

# Hospitalized Influenza Surveillance

Hospitalized influenza cases are based on disease reports of laboratory-positive influenza (via DFA, IFA, viral culture, EIA, rapid test, paired serological tests or RT-PCR) and specimens from hospitalized patients with acute respiratory illness submitted to MDH-PHL by hospitals and laboratories. **Due to the need to confirm reports and reporting delays, consider current week data preliminary.**

## Hospitalized Influenza Cases by Type Minnesota (FluSurv-NET\*)



Hospitalizations  
this week

28

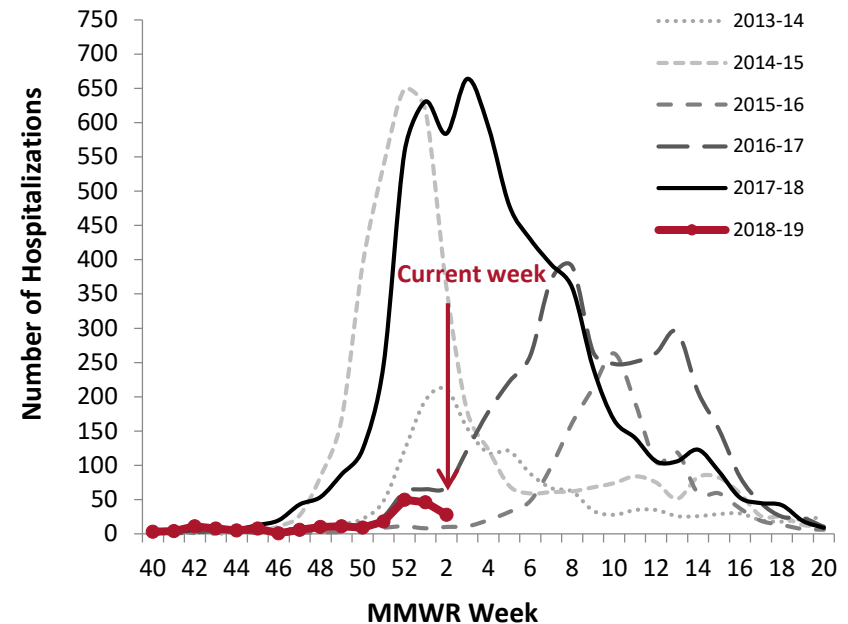
Hospitalizations  
last week

46

Total hospitalizations  
(to date)

218

## Hospitalized Influenza Cases by Season, Minnesota (FluSurv-NET\*)

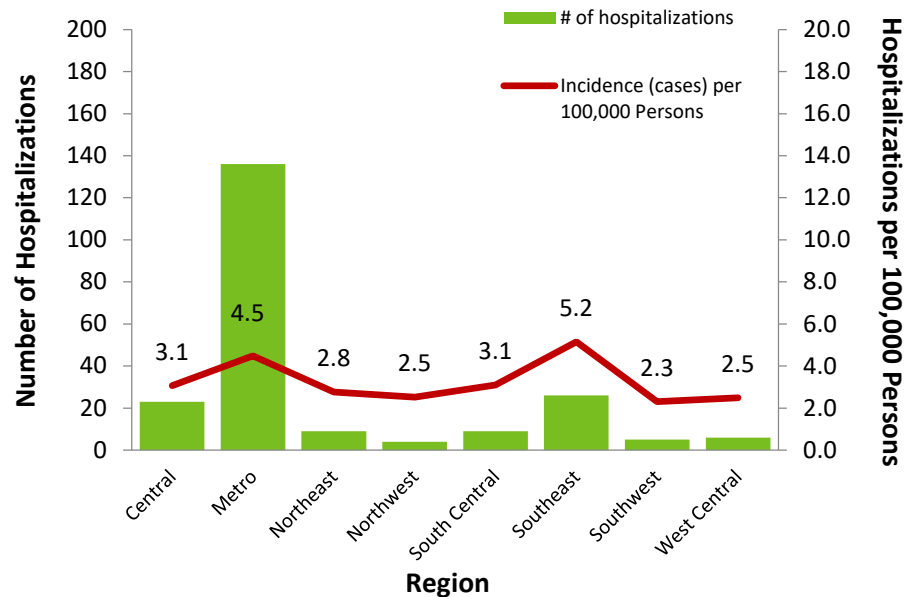


Season	Total hospitalizations (historic)
2013-2014	1,578
2014-2015	4,081
2015-2016	1,538
2016-2017	3,695
2017-2018	6,446
<b>2018-2019</b>	<b>218 (to date)</b>

\*Influenza Surveillance Network

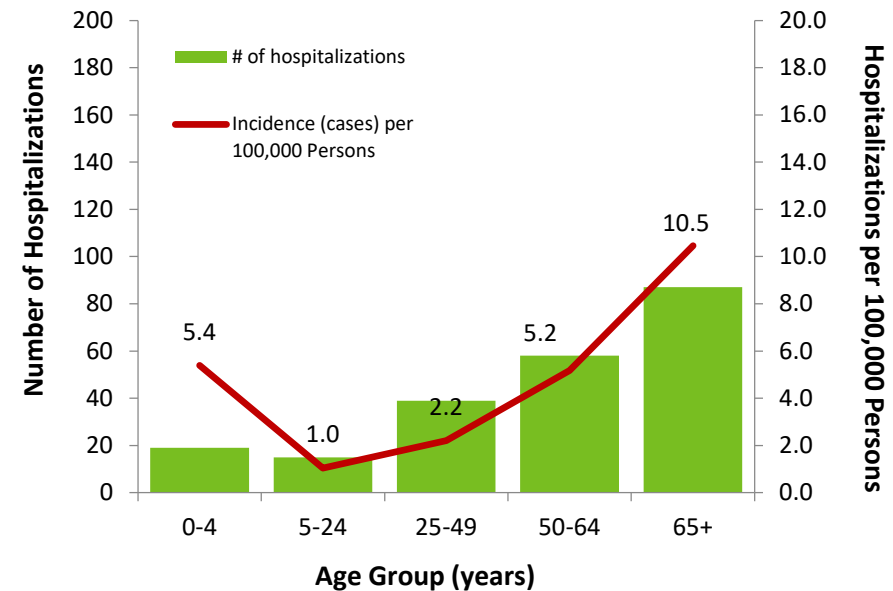
# Hospitalized Influenza Surveillance (continued)

**Number of Influenza Hospitalizations and Incidence by Region, Minnesota**  
September 30, 2018 – January 12, 2019



Region	Hospitalizations this week	Total (to date)
Central	2 (7%)	23 (11%)
Metro	16 (57%)	136 (62%)
Northeast	1 (4%)	9 (4%)
Northwest	1 (4%)	4 (2%)
South Central	3 (11%)	9 (4%)
Southeast	4 (14%)	26 (12%)
Southwest	1 (4%)	5 (2%)
West Central	0 (0%)	6 (3%)

**Number of Influenza Hospitalizations and Incidence by Age, Minnesota**  
September 30, 2018 – January 12, 2019

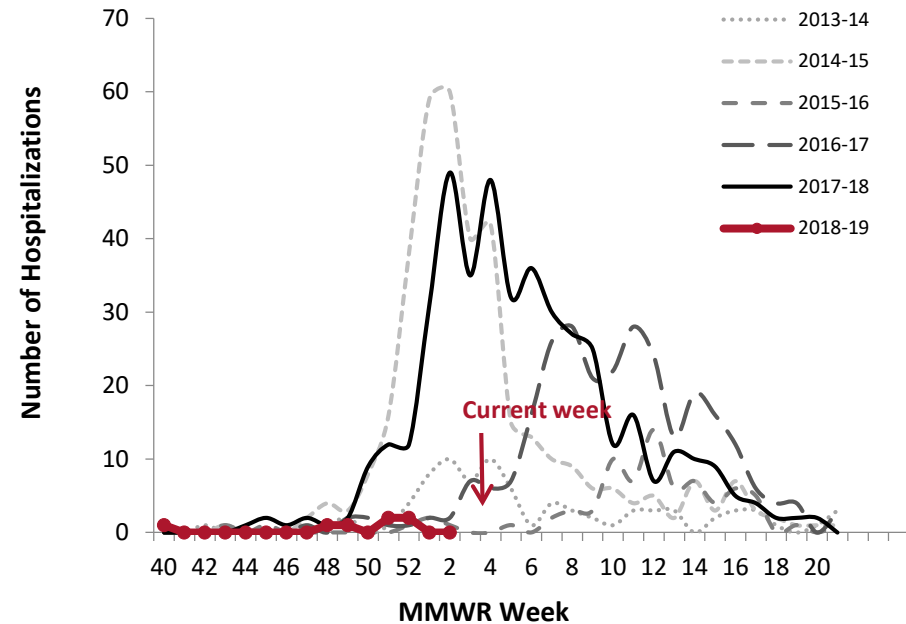


Median age (years) at time of admission
59.5

# Influenza-Associated Death Surveillance

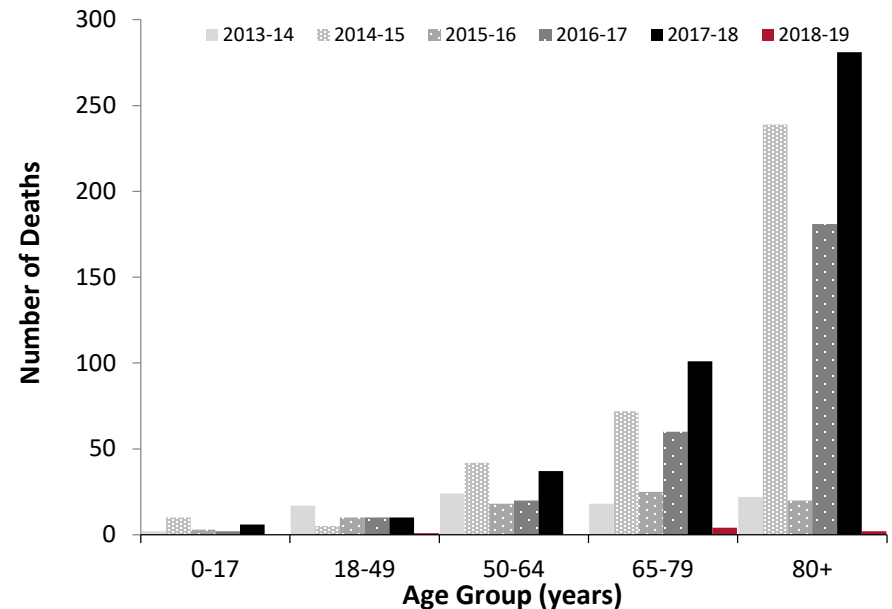
Influenza deaths are collected via reports from Minnesota's death certificate database, hospitals, and long-term care facilities. Decedents with influenza listed as a cause of or contributor to death, have recent laboratory confirmation of influenza, or are part of an ongoing influenza outbreak at a long-term care facility are reported to influenza surveillance. **Due to the need to confirm reports and reporting delays, consider current week data preliminary.**

## Deaths Associated with Influenza by Season, Minnesota



Season	Total deaths (historic)	Total pediatric (<18 years) deaths (historic)
2013-2014	83	2
2014-2015	368	10
2015-2016	76	3
2016-2017	273	2
2017-2018	435	5
<b>2018-2019</b>	<b>7 (to date)</b>	<b>0 (to date)</b>

## Deaths Associated with Influenza by Age Group and Season, Minnesota



Season	Median age (years) at time of death
2013-2014	63
2014-2015	85
2015-2016	68
2016-2017	86
2017-2018	85
<b>2018-2019</b>	<b>72 (to date)</b>

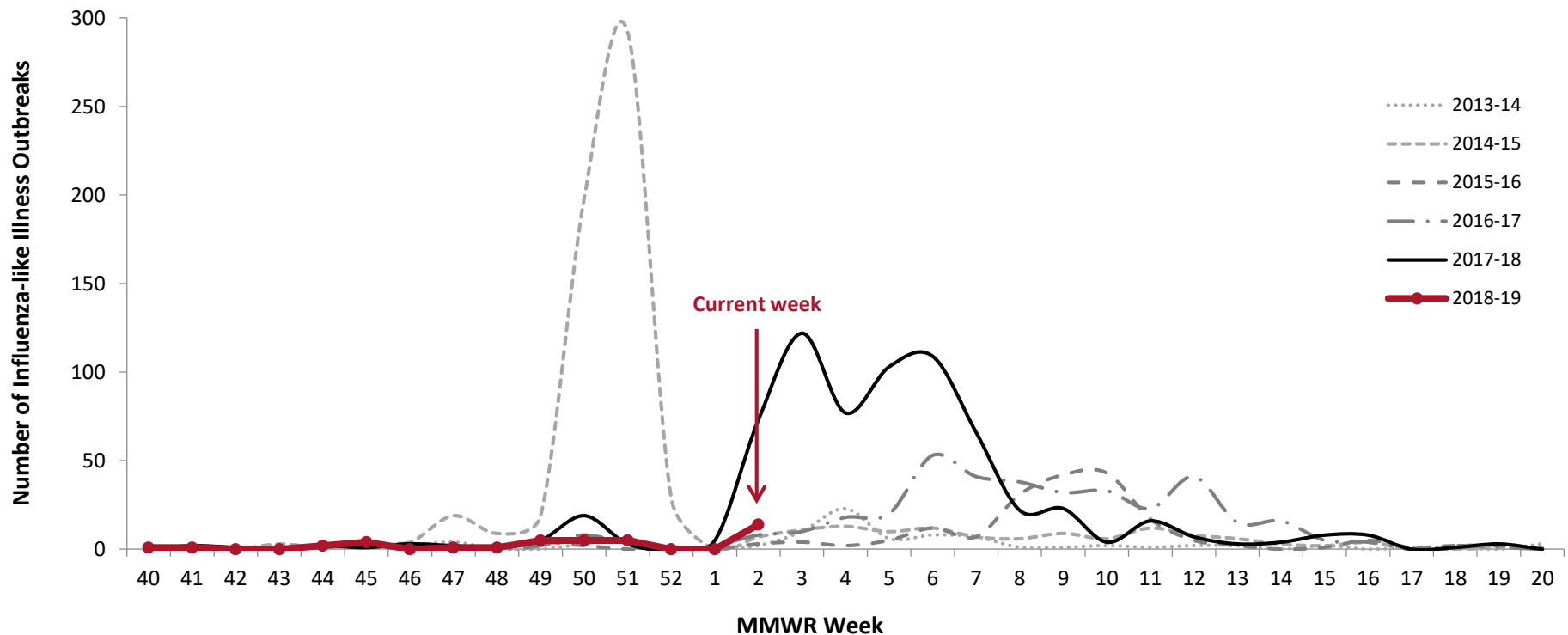
\*Influenza Surveillance Network

# Respiratory Disease Outbreak Surveillance

## School Outbreaks

K-12 schools report an outbreak of influenza-like illness (ILI) when the number of students absent with ILI reaches 5% of total enrollment or three or more students with ILI are absent from the same elementary classroom.

### Influenza-like Illness (ILI) in Schools by Season



New school outbreaks this week

14

New school outbreaks last week

0

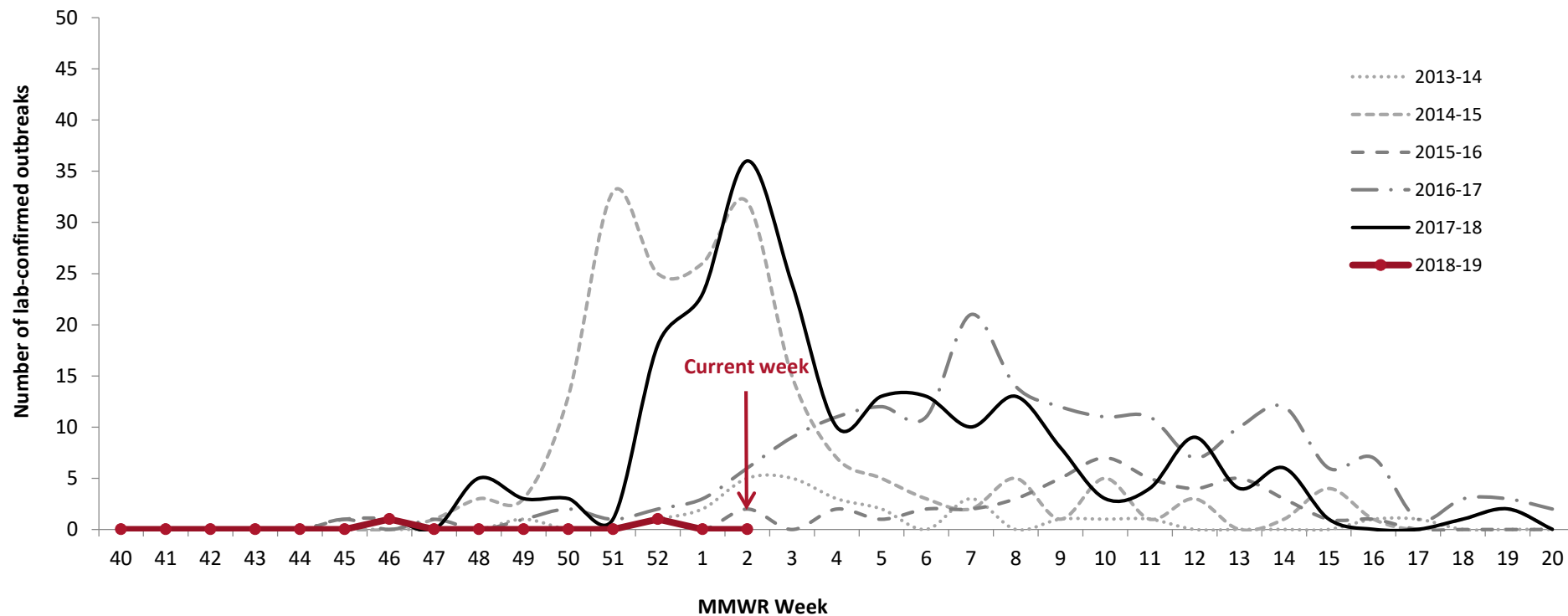
Total this season (to date)

39

## Long-Term Care (LTC) Outbreaks

LTC facilities report to MDH when they suspect an outbreak of influenza in their facility. Laboratory-confirmed outbreaks are reported here.

## Confirmed Influenza Outbreaks in LTC by Season

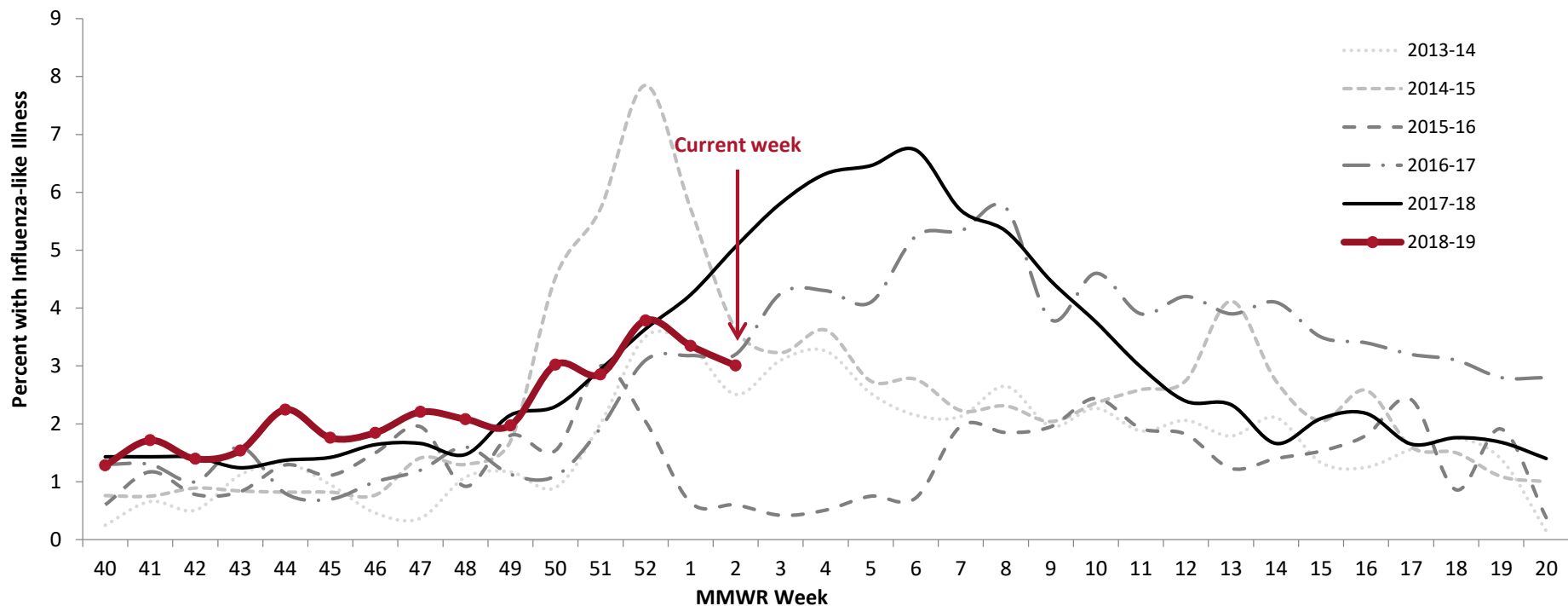


New LTC outbreaks this week	New LTC outbreaks last week	Total this season (to date)
0	0	2

# Sentinel Provider Surveillance (Outpatients)

MDH collaborates with healthcare providers who report the total number of patients seen and the total number of those patients presenting to outpatient clinics with influenza-like illness.

## Percentage of Persons Presenting to Outpatient Clinics with Influenza-Like Illness (ILI)



% of outpatients with ILI this week

3.0%

% of outpatients with ILI last week

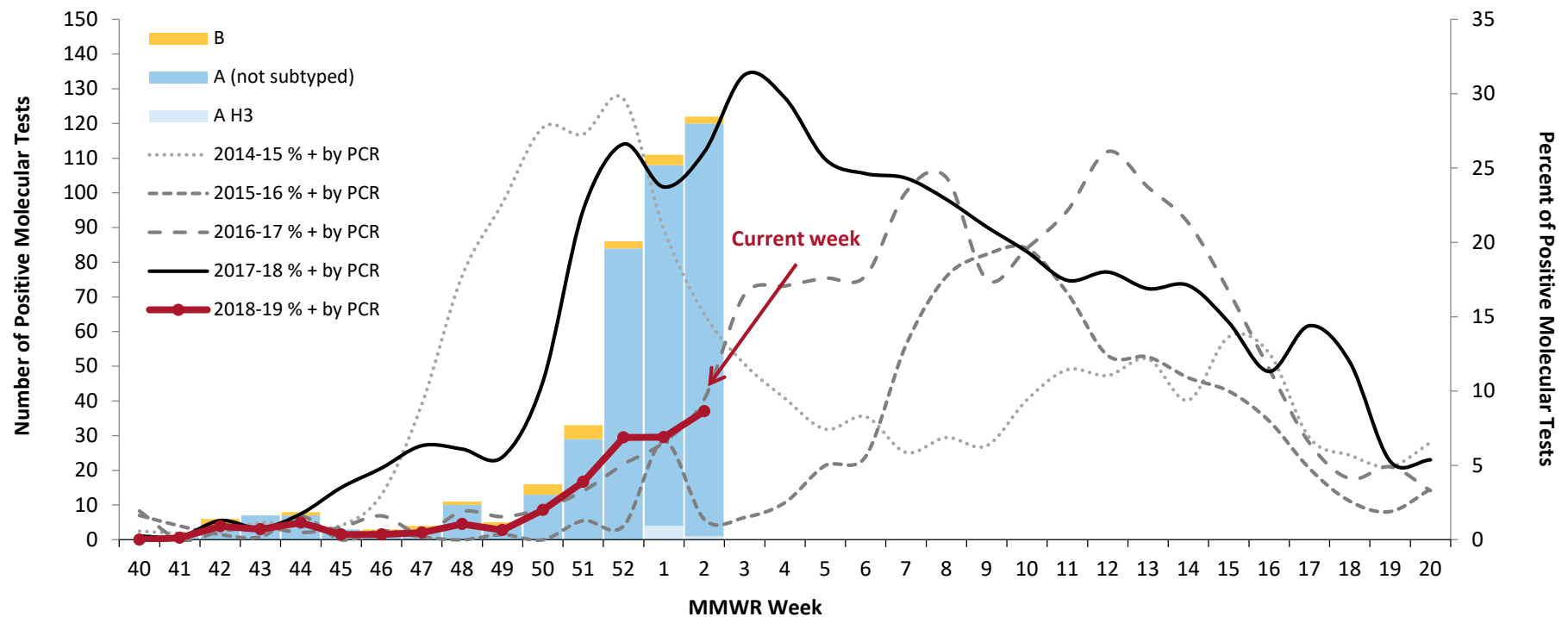
3.3%

\* Indicates current week-data may be delayed by 1 or more weeks

# Laboratory Surveillance

The MN Lab System (MLS) Laboratory Influenza Surveillance Program is made up of more than 310 clinic- and hospital-based laboratories, voluntarily submitting testing data weekly. These laboratories perform rapid testing for influenza and Respiratory Syncytial Virus (RSV). Significantly fewer labs perform PCR testing for influenza and three also perform PCR testing for other respiratory viruses. MDH-PHL provides further characterization of submitted influenza isolates to determine the hemagglutinin serotype to indicate vaccine coverage. Tracking the laboratory results assists healthcare providers with patient diagnosis of influenza-like illness and provides an indicator of the progression of the influenza season as well as prevalence of disease in the community.

## Specimens Positive for Influenza by Molecular Testing\*, by Week



% molecular tests positive this week	% molecular tests positive last week
8.7%	6.9%

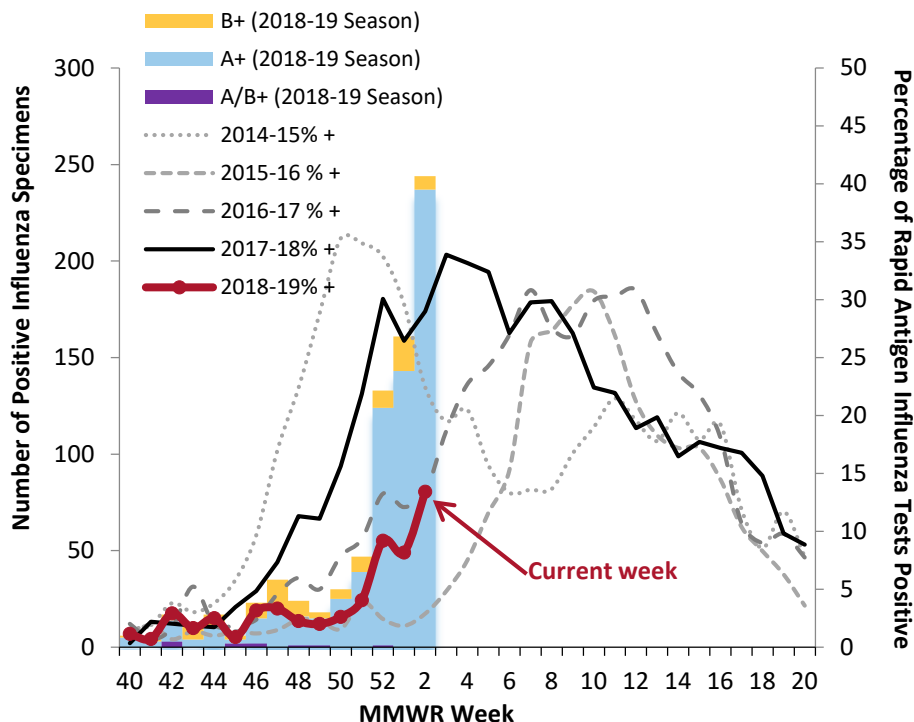
\* Beginning in 2016-17, laboratories report results for rapid molecular influenza tests in addition to RT-PCR results



# Laboratory Surveillance (continued)

## MLS Laboratories – Influenza Testing

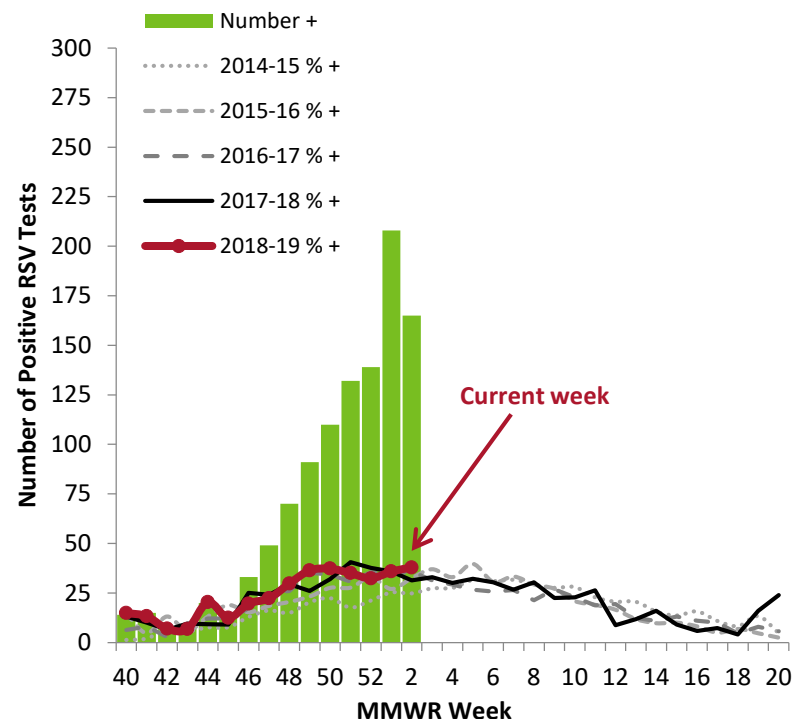
### Specimens Positive by Influenza Rapid Antigen Test, by Week



Region	% rapid antigen influenza tests + (current week)
Northeast	11%
South Central	13%
Southwest	17%
Southeast	24%
Metro	12%
Central	7%
West Central	8%
Northwest	39%
State (overall)	13%

## MLS Laboratories – RSV Testing

### Specimens Positive by RSV Rapid Antigen Test, by Week



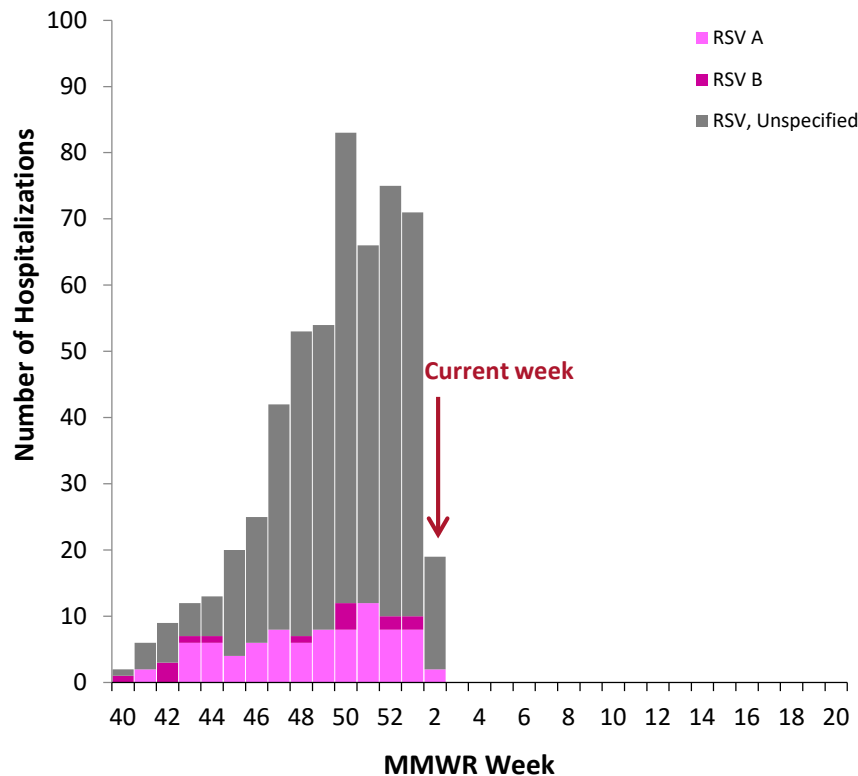
Region	% rapid antigen RSV tests + (current week)
Northeast	32%
South Central	41%
Southwest	32%
Southeast	11%
Metro	40%
Central	46%
West Central	25%
Northwest	25%
State (overall)	38%

# Hospitalized RSV Surveillance

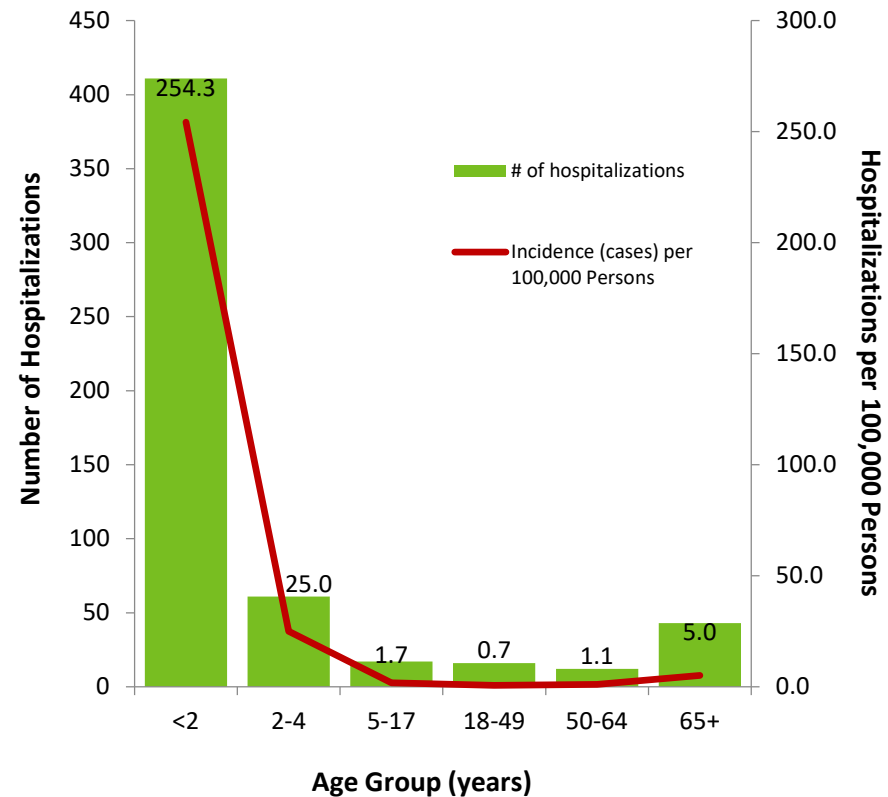
Surveillance for respiratory syncytial virus (RSV) began in September 2016. Hospitalized inpatients of all ages who reside in the 7-county Twin Cities metropolitan area (Anoka, Carver, Dakota, Hennepin, Ramsey, Scott, and Washington) with laboratory-confirmed RSV are reportable.

**Due to the need to confirm reports and reporting delays, consider current week data preliminary.**

## Hospitalized RSV Cases by Subtype, Minnesota



## Number of RSV Hospitalizations and Incidence by Age, Minnesota



Hospitalizations  
this week

19

Hospitalizations  
last week

71

Total  
hospitalizations

560

Median age at time of admission

9 months

# Weekly U.S. Influenza Surveillance Report

2018-2019 Influenza Season Week 1 ending January 5, 2019

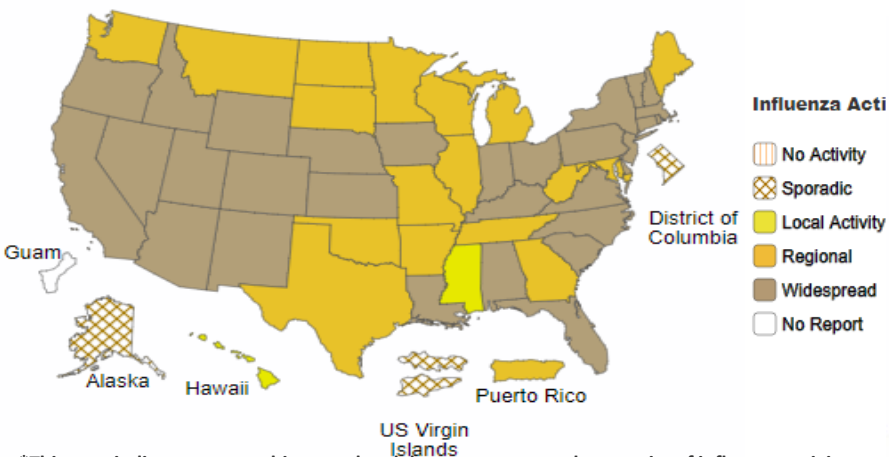
[CDC National Influenza Surveillance \(http://www.cdc.gov/flu/weekly/\)](http://www.cdc.gov/flu/weekly/)

Influenza activity remains elevated in the United States.

Influenza A(H1N1)pdm09, influenza A(H3N2), and influenza B viruses continue to co-circulate.

- **Viral Surveillance:** The percentage of respiratory specimens testing positive for influenza viruses in clinical laboratories decreased slightly. Influenza A viruses have predominated in the United States since the beginning of October. Influenza A(H1N1)pdm09 viruses have predominated in most areas of the country, however influenza A(H3) viruses have predominated in the southeastern United States (HHS Region 4).
- **Influenza-like Illness Surveillance:** The proportion of outpatient visits for influenza-like illness (ILI) decreased from 4.0% to 3.5%, but remains above the national baseline of 2.2%. All 10 regions reported ILI at or above their region-specific baseline level.
- **Geographic Spread of Influenza:** The geographic spread of influenza in 30 states was reported as widespread; Puerto Rico and 17 states reported regional activity; two states reported local activity; the District of Columbia, the U.S. Virgin Islands and one state reported sporadic activity; and Guam did not report.
- **Influenza-associated Hospitalizations** A cumulative rate of 9.1 laboratory-confirmed influenza-associated hospitalizations per 100,000 population was reported. The highest hospitalization rate is among adults 65 years and older (22.9 hospitalizations per 100,000 population).
- **Pneumonia and Influenza Mortality:** The proportion of deaths attributed to pneumonia and influenza (P&I) was below the system-specific epidemic threshold in the National Center for Health Statistics (NCHS) Mortality Surveillance System.
- **Influenza-associated Pediatric Deaths:** Three influenza-associated pediatric deaths were reported to CDC during week 1.

**A Weekly Influenza Surveillance Report Prepared by the Influenza Division**  
**Weekly Influenza Activity Estimates Reported by State and Territorial Epidemiologists\***



\*This map indicates geographic spread and does not measure the severity of influenza activity.

**A Weekly Influenza Surveillance Report Prepared by the Influenza Division**  
**Influenza-Like Illness (ILI) Activity Level Indicator Determined by Data Reported to ILINet**

